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REMARKS

By way of this amendment, claims 1, 4, 5, 9 and 15 have been amended, and claims 2, 3, 6-8, 10, 13, 14 and 18-20 have been cancelled. Claims 1, 4, 5, 9, 11, 12 and 15-17 remain present in this application. Applicants respectfully request reconsideration and allowance of the present application.

In the Office Action, claims 1, 7, 15 and 19 were rejected under 35 U.S.C. §102(b) as being anticipated by Herb et al. (U.S. Patent No. 5,808,210). Additionally, claims 2, 3, 5, 6, 10, 12, 13 and 16-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Herb et al. in view of Chapman et al. (U.S. Patent No. 5,955,678). Further, claims 4 and 11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Herb et al. in view of Chapman et al. as applied to claims 2, 3, 5, 6, 10, 12, 13 and 16-18 above, and further in view of Kuznia et al. (U.S. Patent No. 6,092,425). Finally, claims 8 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Herb et al.

Applicants have amended the claims, including all of the independent claims, to recite features found in the embodiment shown in FIGS. 3 and 4, in order to expedite allowance of the present application. The dependent claims reciting the embodiment shown in FIGS. 5 and 6 have been cancelled. It is respectfully submitted that the pending claims, as amended, should be allowable for the following reasons.

Applicants' claimed invention as recited in claim 1, as amended, is directed to a pressure sensor module comprising a base structure and a pressure sensor adhered to the base structure via an adhesive layer. The pressure sensor comprises a pressure sensing element. The adhesive layer adheres only a first portion of the pressure sensor to the base structure to create an isolation gap between a second portion of the sensor and the base structure. The isolation gap forms a cantilever member via the second portion of the sensor to provide stress isolation to the pressure sensing element.

In contrast to Applicants' claims, as amended, the Herb et al. patent discloses an absolute silicon pressure sensor (10) fabricated on a substrate (28). In the embodiment shown in FIG. 9A and 9B of Herb et al., the pressure sensor (10) is mounted on a suspended paddle (45) of substrate (28) to achieve stress isolation. The suspended paddle (45) is formed by

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forming a trench (52) extending into die (28). The trench (52) is formed after sensor (10) has been formed on top of substrate (28).

Applicants submit that the pressure sensor of Herb et al. does not teach each and every feature recited in Applicants' claims, as amended. Specifically, Herb et al. fails to teach a pressure sensor adhered to a base structure via an adhesive layer that forms the cantilever member. Instead, the sensor (10) in Herb et al. is fabricated on top of substrate (28) and, thereafter, a trench is formed in substrate (28). This is believed to be an expensive and time consuming process that requires prefabrication of the sensing element on top of substrate (28).

In contrast, Applicants' sensor module forms the cantilever member by way of an adhesive layer which also allows the pressure sensor to be fabricated independent of the base structure, prior to its adhesion to the base structure.

Accordingly, the Herb et al. patent does not teach each and every limitation of the pending claims, as amended, and therefore the rejection of the claims under 35 U.S.C. §102(a) as being anticipated by Herb et al. should be withdrawn, which action is respectfully solicited.

With respect to the obviousness rejections, Applicants submit that Herb et al. does not teach nor suggest forming a cantilever member by way of an adhesive layer as recited in Applicants' claimed invention, as discussed above. The Chapman et al. patent merely discloses that an absolute pressure sensor is bonded to an aluminum nitrite substrate. Nowhere does Chapman et al. teach or suggest the formation of a cantilever member by way of an adhesive layer to provide stress isolation as recited in Applicants' claimed invention.

The Kuznia et al. patent was cited for teaching a sensor cell having circuitry. Kuznia et al. discloses a differential pressure sensor having a housing and isolator for providing stress isolation. Nowhere does Kuznia et al. teach or suggest an adhesive layer for forming a cantilever member as recited in Applicants' claims, as amended.

Neither of the Chapman et al. or the Kuznia et al. patents makeup for the deficiencies of Herb et al. Accordingly, the claims, as amended, would not have been rendered obvious to one of ordinary skill in the art at the time of the present invention in view of Herb et al. alone, or further in combination with Chapman et al. and Kuznia et al., and the rejection of the claims, as amended, should therefore be withdrawn, which action is respectfully solicited.

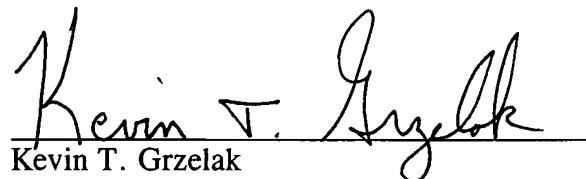
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By way of the foregoing discussion, Applicants have demonstrated that the claims, as amended, define patentable subject matter and are in condition for allowance. If the Examiner has any questions regarding patentability of these claims, Applicants suggest that the Examiner contact Applicants' undersigned attorney to discuss the same at the Examiner's convenience.

Respectfully submitted,

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